CSC3320 System Level Programming
Lab Assignment 7 - Post-Lab

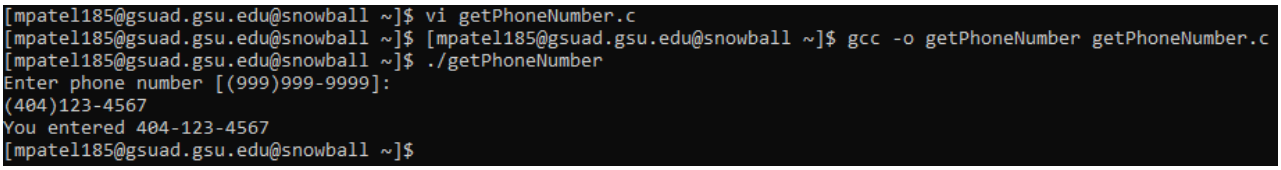
Due at 11:59 pm on Friday, March 5, 2021

Purpose: Learn how to get input and print out formatted results using *scanf* and *printf* separately in C.

Part 1:

1) Write a C program named as ***getPhoneNumber.c*** that prompts the user to enter a telephone number in the form (999)999-9999 and then displays the number in the form 999-999-999:

```
Enter phone number [(999)999-9999]: (404)123-4567
You entered 404-123-4567
```




```
#include <stdio.h>

int main(void){
     int a, b, c;
     int address;

     printf("Enter phone number
[(999)999-9999]:\n");
     address = scanf("(%d)%d-%d",&a,&b,&c);

     printf("You entered %d-%d-%d\n",a,b,c);

     return 0;

}
```

Question: Execute your **getPhoneNumber.c** and attach a screenshot of the output. Then write the source code of **getPhoneNumber.*c*** in your answer sheet and upload your file **getPhoneNumber.*c*** to googleClassroom.

2) Write a program named as ***calcPrice.***c that formats product information entered by the user and calculate the total amount of purchase.

The item number, quantity and date should be left justified; the unit price and total amount should be right justified. Hint: Use tabs to line up the columns.
Question: Execute your **calcPrice.c** and attach a screenshot of the output. Then write the source code of **calcPrice.c** in your answer sheet and upload your file **calcPrice.c** to classroom.

```
[mpatel185@gsuad.gsu.edu@snowball ~]$ vi calcPrice.c
[mpatel185@gsuad.gsu.edu@snowball ~]$ gcc -o calcPrice calcPrice.c
[mpatel185@gsuad.gsu.edu@snowball ~]$ ./calcPrice
Enter item number: 77
Enter unit price: 77
Enter quantity: 7
Enter purchase date (mm/dd/yyyy): 77/77/7777
Item Unit       Price   QTY     Purchase Date   Total Amount
77              77.0    7       77/77/7777              539.0
[mpatel185@gsuad.gsu.edu@snowball ~]$
```

```
#include <stdio.h>


int main (void){

     int item, quantity;

     float price;

     char date[12];


     printf("Enter item number: ");

     scanf("%d",&item);


     printf("Enter unit price: ");

     scanf("%f",&price);


     printf("Enter quantity: ");

     scanf("%d",&quantity);
```

```
    printf("Enter purchase date (mm/dd/yyyy): ");
    scanf("%s",date);

    float total=price*quantity;

    printf("Item Unit\tPrice\tQTY\tPurchase Date\tTotal
Amount\n");

printf("%d\t\t%-.1f\t%d\t%s\t\t%-.1f\n",item,price,quantity,date,
total);

    return 0;

}
```

Part 2: (Optional)

Note : This part is not for grading. But you will get some feedback. Can you write a shell script to finish the same task as in question 1) of Part 1?

Submssion:

- Please follow the instructions below step by step, and then write a report by answering the questions and upload the report (named as Lab7_FirstNameLastName.pdf or Lab7_FirstNameLastName.doc) to Google Classroom, under the rubric Lab 7 Out-of-lab Assignment. • Upload files **getPhoneNumber.c** and **calcPrice.c** to the rubric named "Lab7" of the classroom. **Note: if you do not upload the C files you would get zero for this assignment**.
- Please add the lab assignment NUMBER and your NAME at the top of your

file sheet.